

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 30 December 2005
SUBJECT: Pantex Plant Weekly Report

Formality of Operations: Earlier this month, PXSO notified BWXT of its intent to formally validate all actions associated with the BWXT Conduct of Operations Improvement Plan. PXSO expects that BWXT will provide objective evidence files for each closed Improvement Plan element to facilitate the PXSO review. PXSO also plans to conduct a performance-based effectiveness review of the completed actions during late spring 2006.

DOE Order 420.1A, *Facility Safety*: DOE Order 420.1A, issued in May 2002, has not been incorporated into the Facility Engineering & Construction Standard/Requirements Identification Document (S/RID). It appears that DOE Order 420.1, which was approved in 1995 and superseded by 420.1A, was also never incorporated into the Facility Engineering & Construction S/RID. BWXT previously committed to incorporate 420.1A construction requirements into the S/RIDs by the end of the 2005 calendar year. Last week, BWXT informed PXSO that the Facility Engineering & Construction S/RID will not be updated to include the 420.1A requirements until February 2006. Rather than the engineering and construction requirements contained in 420.1A, BWXT has implemented the requirements contained in the following directives: DOE M 440.1-1, *Explosives Safety Manual*; DOE-STD-1066-99, *Fire Protection Design Criteria*; and DOE Order 6430.1A, *General Design Criteria* (6430.1A was cancelled in 1995). It is currently unknown if a gap analysis has been performed by either BWXT or PXSO to determine what 420.1A requirements, if any, are not covered by the three aforementioned documents.

W84 Operations: BWXT is planning and submitting safety basis documentation to authorize W84 recoding operations for a limited number of units. BWXT is developing a change to the safety basis that would govern B61, B83, W80, and W84 recoding operations. The W84 Nuclear Explosive Safety Study (NESS) expired in January 2003 and the W84 recoding process has not been performed at Pantex since 1998. BWXT has recommended that a contractor readiness assessment (CRA), an NNSA RA, and a limited scope NESS should be performed prior to the start-up of the aforementioned operations. PXSO has not yet approved the safety basis changes.

B83 Seamless Safety for the Twenty-First Century (SS-21): The B83 SS-21 NESS was conducted during February to May of 2005. In the final NESS report, a senior technical advisor (STA) to the NESS formally commented "that while the B83 has met at least the minimal safety needs for SS-21, it was not a fully comprehensive SS-21 process." In particular, the STA noted that the actual B83 SS-21 processes are little changed from the historical processes and that further reducing the number of lifts and introducing additional new tooling could have improved the efficiency and effectiveness of the B83 SS-21 process. NNSA approved the B83 NESS last month and noted that the extent of SS-21 implementation for the B83 is a result of deliberate management decisions made early in the SS-21 milestone decision process.